COOPER LIGHTING - METALUX®

DESCRIPTION

The HBOT series is an outstanding solution for high mounting height industrial or retail applications. The HBOT optic has been optimized to provide maximum performance. Optional uplight component is provided to enable excellent ceiling uniformity. HBOT's high lumen package allows the benefits of fluorescent to be applied at high mounting heights that were traditionally exclusive to H.I.D. The primary benefits include exceptional color rendering, high system efficacy, 95% lumen maintenance, long lamp life, instant on/instant re-strike, economical dimming, and uniform brightness control. Primary applications include retail, shopping malls, light industrial, and recreational environments.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

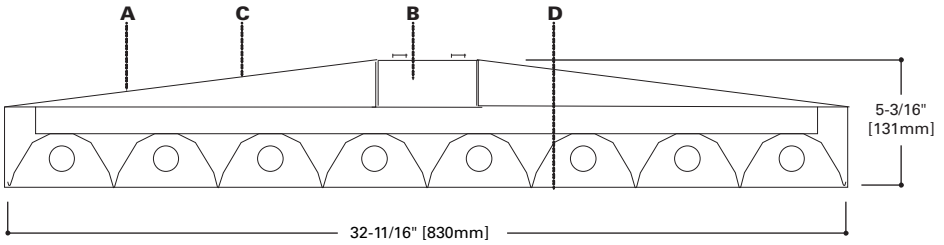
A ... Construction
Specification grade open body housing, end plates and socket tracks are die formed 20-gauge cold rolled steel. The HBOT channel provides strength and numerous KOs for easy installation. Top Ballast Access Plate. Allows for removal or service of ballast from above without removal of lamps. Die formed external reflectors are available in both high reflectance specular material or in painted-after-fabrication white enamel.

B ... Electrical
Class "P" ballasts are positively secured by mounting bolts. Roto-lock lampholders. Optional modular power receptacle and cord sets meets UL2459 and NEC 410.73 and are UL/cUL rated for make and break under load from outside the luminaire. UL/CUL listed. Suitable for damp locations. Thermally optimized for environments up to 122°F (50°C) when used with high temperature ballasts.

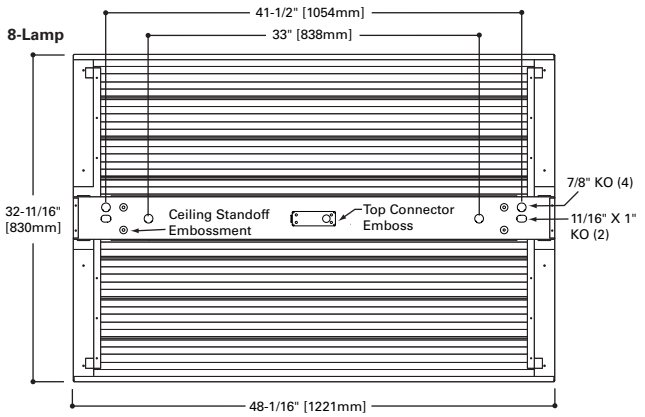
C ... Finish
Electrostatically applied baked white enamel finish is preceded by a multistage cleaning cycle, iron phosphate coating with rust inhibitor.

D ... Downlight/Uplight Optics
Die formed reflectors are faceted for 8 lamp configurations with two optical distributions - medium and wide. Medium beam optical modules utilize 95% specular aluminum while the wide distribution utilizes a high performance 95% reflective polyester powder coated finish. Uplight option provided to enable ceiling uniformity.

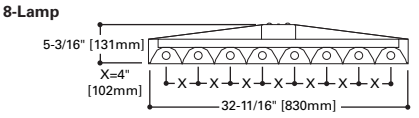
Mounting
The HBOT series is suited for surface or suspension mounting with wire hook and chain set, stem or cable mounting. Optional top connector box mounting is available.



DIMENSION TOP VIEW



LAMP CONFIGURATIONS



F-BAY
HBOT T8 SERIES

Nominal 3' x 4' High-Bay
(8) T8 Lamps
HIGH-BAY INDUSTRIAL
OPEN TOP LUMINAIRE

F-BAY™ FLUORESCENT HIGH-BAY

ENERGY DATA

Input Watts:
EB Ballast
832 = 218

EB/Plus Ballast
832 = 294

ER Ballast
832 = 224

ER/Plus Ballast
832 = 288

Luminaire Efficacy Rating
LER = 77 (White)
LER = 84 (Specular)
Catalog Number: 3HBOT-832-UPL

Yearly Cost of 1000 Lumens, 3000 hrs. at .08 KWH = $2.84

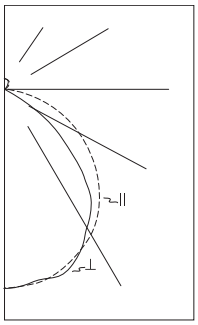
* Reference the lamp/ballast data in the Tecnical Section for specific lamp/ballast requirements

** Consult Pre Sales Technical Support.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT
Safe and convenient means of disconnecting power

ISO SYSTEMS CERTIFIED



3HBOT-832-UPL
(2) Electronic Ballasts
(8) 32WT8 lamps
3000 lumens
Spacing criterion: (II) 1.3 x mounting height, (⊥) 1.3 x mounting height
Efficiency 89.8%
Test Report: 18445
LER =84
Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $2.84

Candela

Angle	Along II	45°	Across ⊥
0	9244	9244	9244
5	9215	9146	9136
10	9092	8966	8971
15	8882	8776	8995
20	8595	8674	8786
25	8228	8404	8223
30	7779	7876	7417
35	7261	7129	6852
40	6670	6294	5874
45	6025	5639	4647
50	5311	4603	3196
55	4574	3427	1921
60	3783	2141	954
65	3000	1061	309
70	2204	378	30
75	1442	46	13
80	765	18	1
85	250	30	21
90	13	1	1

Coefficients of Utilization

Effective floor cavity reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	103	103	103	103	98	98	98	93	93	93	88	88	88	86
1	99	95	92	89	96	93	90	87	88	86	84	84	83	81	81	79	78	76
2	91	85	80	75	88	83	78	74	79	75	72	76	73	70	73	70	68	66
3	84	76	69	64	81	74	68	63	71	66	62	68	64	60	65	62	59	57
4	77	68	61	56	75	66	60	55	64	58	54	61	57	53	59	55	52	50
5	72	61	54	49	70	60	53	48	58	52	47	56	51	46	54	49	46	44
6	66	55	48	43	64	54	48	43	52	46	42	51	45	41	49	44	41	39
7	62	50	43	38	60	50	43	38	48	42	37	46	41	37	45	40	36	35
8	58	46	39	34	56	45	39	34	44	38	34	43	37	33	41	37	33	31
9	54	43	36	31	52	42	35	31	41	35	30	39	34	30	38	33	30	28
10	50	39	33	28	49	39	32	28	38	32	28	37	31	27	36	31	27	26

Zonal Lumen Summary

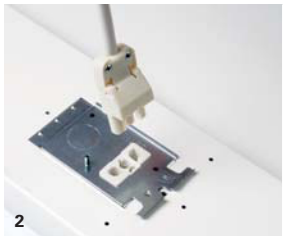
Zone	Lumens	%Lamp	%Fixture
0-30	7164	29.8	33.2
0-40	11585	48.3	53.8
0-60	18756	78.2	87.0
0-90	20692	86.2	96.0
0-180	21549	89.8	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	8579	8030	6617
55	8029	6016	3372
65	7148	2527	735
75	5611	178	49
85	2887	344	237

Modular F-Bay Power Supply

Cooper Lighting's F-Bay Modular Power Supply option allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power with F-Bay Modular Power Supply. Access to the individual fixtures power supply allows servicing without turning off all the fixtures disrupting occupants. F-Bay Modular Power Supply is a time saver in installation – simply plug & power.



1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate.
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply.

No internal fixture access required for installation or disconnecting power.

Modular Motion Sensor Option supplied with Mounting Box and Modular Power Supply Receptacle.

Code Compliance

- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of Occupancy Sensor without hard connections
- Receptacles complete with insulating dustcap

ORDERING INFORMATION

SAMPLE NUMBER: 3HBOT-832-UNV-EB82/PLUS-UPL-U

Width
3=32" wide

Series
HBOT=High Bay Open Top Version

No. of Lamps
8=8 Lamps

Lamp Type
32=32WT8 (4') Lamp

Distribution
Blank=Medium (Specular Aluminum)
G=Wide (White Painted)

Voltage[2]
UNV=Universal 120/277 Voltage
UNC=Universal 347/480 Voltage (T5 linear only)[6]
120V=120 Volt
277V=277 Volt
347V=347 Volt
480V=480 Volt

Options
Lamps Installed
L8830=T8 Lamp, 85CRI 3000K
L8835=T8 Lamp, 85CRI 3500K
L8841=T8 Lamp, 85CRI 4100K
L8850=T8 Lamp, 85CRI 5000K
GL=Single Element Fuse
GM=Double Element Fuse
EL=Emergency Installed[2]

Ballast Type
T8 Systems
EB8__=T8 Electronic Instant Start.[7] Total Harmonic Distortion < 10%. No. of Ballast: 2 or 3
EB8__/PLUS=T8 Electronic Instant Start.[7] High Ballast Factor >1.15. Total Harmonic Distortion < 10%. No. of Ballast: 2 or 3
ER8__=T8 Electronic Program Rapid Start.[7] Total Harmonic Distortion < 10%. No. of Ballast: 2 or 3
ER8__/PLUS=T8 Electronic Program Start.[7] High Ballast Factor >1.15. Total Harmonic Distortion < 10%. No. of Ballast: 2 or 3

Options
UPL=Uplight Apertures
MWS=Modular Wiring System
MS=Aisle Coverage Motion Sensor[4]
MSO=360° Coverage Motion Sensor[4]
MP=Modular Power Receptacle[1][2]
PC3-=3' Power Cord & Plug (Specify Voltage)[2]
PC6-=6' Power Cord & Plug (Specify Voltage)[2]
TCBP=Top Connector Box Plate[5]

Packaging
U=Unit Pack
PAL=Palletized Out of Carton
PALC=Palletized In Carton

Accessories (order separately)
AYC-CHAIN/SET/U=(2) Hooks, 36" Chain Sets w/S-Hooks
TCB=Top Connector Box
RH-1=Retrofit Hanger
FH-1=Fixture Hook
FL-1=Fixture Loop
MPC6=6' Modular Power Cord & Plug (Specify Voltage)
MC6=6' Modular Power Cord
MMS-CPD1200H=Aisle Motion Sensor, Box, Modular Power Receptacle (120/277V)
MMS-CPD500H=360° Motion Sensor, Box, Modular Power Receptacle (120/277V)

NOTES: [1]Requires use of MC_ or MPC_cord accessories, specify voltage for plugs. [2]Voltage must be specified when ordered with plugs, motion or emergency ballasts. [4]Specify voltage on ballast. [5]For use with Top Connector Box options. See accessories. [6]2 lamp ballast configurations only in EHT-UNC versions. [7]ER8 and EB8 ballast systems suitable for operation in ambient environments up to 122°F (50°C) in open uplight configuration.

SHIPPING INFORMATION

Catalog No.	Wt.
3HBOT-832-G-120V-UPL	27 lbs.